acid is first split off from the organic compound by means of enzymes. This suggestion is strengthened by the facts that Ivanoff has prepared an enzyme from this mold which decomposes nucleic acid with the liberation of phosphoric acid, and the author himself has shown the presence in another mold of an enyzme capable of hydrolyzing casein.—H. Hasselbring.

Current taxonomic literature.—O. Ames (Phil. Journ. Sci. Bot. 7:1-27. 1912) in continuation of his studies in the Orchidaceae has published 27 new species of orchids from the Philippine Islands.—O. Beccari (Pomono Coll. Journ. Ec. Bot. 2:253-276. 1912) under the title "Palms indigenous to Cuba I" recognizes 14 genera, 3 of which are treated in detail in the present paper. One new species is added to the genus Oreodoxa, namely O. princeps. -C. H. BISSELL and M. L. FERNALD (Rhodora 14:91, 92. 1912) record a new variety of Lespedeza (L. capitata var. stenophylla) from Illinois and Connecticut. G. BITTER (Rep. Sp. Nov. 10:489-501. 1912) places on record supplementary data to his recent monograph of the genus Acaena and includes descriptions of new varieties from Central and South America. The same author (ibid. 529-565) under the title "Solana nova vel minus cognita I" has published 36 new species of Solanum also from Central and South America. -S. F. BLAKE (Rhodora 14:102-106. pl. 94. 1912) characterizes several new forms of Peltandra virginica.—E. Brainerd (Bull. Torr. Bot. Club 39:85-97. pls. 5-7. 1912) presents an interesting article on "Violet hybrids between species of the palmata group," recording several new hybrids in the genus.—A. Brand (Univ. Calif. Pub. Bot. 4:209-227. 1912) presents a preliminary consideration of the Hydrophyllaceae of the Sierra Nevada region. Several new varieties and forms are described and certain changes in nomenclature are made. The same author (Phil. Journ. Sci. Bot. 7:29-36. 1912) records the results of further investigations on the Symplocaceae of the Philippine Islands, adds 3 new species to Symplocos, and gives a revised key to the 26 recognized Philippine species of this genus.—T. S. Brandegee (Univ. Calif. Pub. Bot. 4:269-281. 1912) under the title "Plantae Mexicanae Purpusianae IV" has published 29 new species and 2 varieties of flowering plants. One new genus (Oxyrhynchus) of the Leguminosae is proposed.—H. Brauns (Verhandl. K. K. Zoolog.-Bot. Gesell. Wien 61:139-143. 1911) describes 6 new species of Nitella, 2 of which are from Costa Rica.—J. Broadhurst (Bull. Torr. Bot. Club 39:257-278. pls. 21, 22. 1912) under the title "The genus Struthiopteris and its representatives in North America" gives a revision of the genus, recognizing 9 species, of which 2 are new to science.—J. Burtt-Davy and R. Pott-Leendertz (Ann. Transvaal Mus. 3:119-182. 1912) have issued a check list of the flowering plants and ferns of the Transvaal and Swaziland. Approximately 3240 species are enumerated, representing 920 genera and 157 families.—E. J. BUTLER (Ann. Botany 25: 1023-1035. 1911) describes and illustrates a new genus and species (Allomyces arbuscula) of the Leptomitaceae from India.—E. Claassen (Ohio Nat. 12:543-548. 1912) records about 125 species and varieties of lichens from

northern Ohio.—F. S. Collins (Tufts Coll. Studies Sc. Ser. 3:69-109. pls. I, 2. 1912) in a supplementary paper on "The green algae of North America" records important data on this group of plants and adds several new species, varieties, and forms.—E. B. COPELAND (Philip. Journ. Sci. Bot. 6:359-364. 1911) under the title of "Cyatheae species novae orientales" has published several new to science. The same author (ibid. 7:47-68. 1912) makes important contributions to our knowledge of the fern flora of the Philippines and describes 29 species new to science.—H. N. Dixon (Journ. Bot. 50: 145-156. pl. 517. 1912) in continuation of his studies of the mosses of India has published jointly with Cardot several species new to science and proposes a new genus (Bryosedgwickia) of the Entodontaceae.—A. D. E. Elmer (Leafl. Philip. Bot. 4: 1475-1520. 1912) has described 40 new species of flowering plants from the Philippine Islands.—A. W. Evans (Bull. Torr. Bot. Club 39: 209-225. pls. 16, 17. 1912) in continuation of studies in the Hepaticae of Puerto Rico describes and illustrates a new species and variety of Diplasiolejeunea.—H. S. FAWCETT (Phytopathology 2:109-113, pls. 8, 9. 1912) has published an account of a new fungus (Phomopsis citri) which is said to cause the so-called stem-end rot of citrus fruits.—W. FAWCETT (Journ. Bot. 50:177-182. pl. 518. 1912) has published 9 new species of Pilea and a new Peperomia from Jamaica. -F. Fedde (Rep. Sp. Nov. 10:478-480. 1912) in continuation of his studies on the genus Corydalis records 2 new species and a new variety from western and southwestern United States.-M. L. FERNALD and K. M. WIEGAND (Rhodora 14:115, 116. 1912) record a new variety of Carex (C. scoparia var. subturbinata) from Newfoundland, etc.—H. M. HALL (Univ. Calif. Pub. Bot. 4:195-208. 1912) under the title "New and noteworthy Californian plants I" records important notes on plants of the region indicated and makes several new combinations as the result of field and herbarium study.—R. HAMET (Notizblatt 5: 277, 278, 1912) has published a new species of Sedum (S. Adolphi) based on plants cultivated in the Royal Botanical Garden at Dahlem-Steglitz from seeds collected in Mexico by Purpus.-L. L. Harter and E. C. Field (Phytopathology 2:121-124. 1912) under the title "Diaporthe, the ascogenous form of sweet potato dry rot" describes a new species (Diaporthe batatatis).—A. HEIMERL (Oesterr. Bot. Zeitschr. 51:10, 11. 1911) has published a new species of Hilleria (H. longifolia) from Peru.—A. A. Heller, (Muhlenbergia 8:49-58. 1912) describes a new species of Castilleja (C. lapidicola) and raises the sectional name Siphonella Gray to generic rank, citing Gilia Nuttallii Gray as the type of the proposed genus. The same author (ibid. 61-71) in continuation of his studies in the genus Lupinus describes two new species from Oregon.-F. HEYDRICH (Bib. Bot. Heft 75, pp. 1-21, pls. 1, 2. 1911) has proposed the generic name Crodelia to which is transferred Lithophyllum incrustans Phil. Some 25 forms of this species are indicated under the new combination.—J. HUTCHINSON (Kew Bull. 1912. 223, 224) has published a new Sapium (S. cladogyne) from British Guiana.—A. KNEUCKER (Allgem. Bot. Zeits. Beilage zu Jahrgang. 1911. pp. 12) has described 3 new species in the Cyperaceae from

the Philippine Islands.—K. KRAUSE (Notizblatt 5: 264, 265. 1912) records 2 new species of Phoradendron from Costa Rica. The same author (ibid. 266, 267) has published 2 new species of Araceae from the Philippines.-F. D. LAMBERT (Tufts Coll. Studies Sci. Ser. 3:111-115, pl. 3. 1912) describes and illustrates a new genus and species of alga (Didymosporangium repens) of the Chaetophoraceae, found on Antithamnion plumula at Naples, Italy.-H. Léveillé (Bull. Geogr. Bot. 21:149. 1911) has published a new species of Epilobium (E. Arechavaletae) from Uruguay.-J. M. MACFARLANE (Contr. Bot. Lab. Univ. Penn. 3:207-210. pls. 1, 2. 1911) has published 2 new species of Nepenthes (N. Merrilliana and N. truncata) from the Philippine Islands.—B. MACKENSEN (Bull. Torr. Bot. Club 39: 289-292. 1912) records 3 new species of Opuntia from Texas.—J. H. MAIDEN (Rev. Euclayptus 2, parts 4-6. pp. 135-216. pls. 61-72. 1912) contains descriptions, notes, and illustrations of several different species of Eucalyptus.—G. MASSEE (Kew Bull. 1912. 189-191) has described several now species of fungi, including one (Eutypa gigaspora) from Trinidad.—E. D. MERRILL (Phil. Journ. Sci. Bot. 7:71-107. 1912), under the title "Sertulum Bontocense" has described 32 new species of flowering plants from the Island of Luzon, P.I., and proposes a new genus (Vanoverberghia) of the Zingiberaceae. The same author (ibid. 6:369-406) presents a synoptical revision of the Philippine species of Begonia, recognizing 59 species of which 33 are described as new.—В. Nемес (Bull. Int. Acad. Sci. Bohême 16:67-84. pls. 1, 2. 1911) under the title "Zur Kenntnis der niederen Pilze I. Eine neue Chytridiazee" presents a detailed account of a fungus to which he gives the name Sorolpidium Betae, nov. gen. et sp.-R. PILGER (Nobizblatt 5:259-263. 1912) has published 10 new species of Plantago from America.—L. RADLKOFER (Phil. Journ. Sci. Bot. 6:365-367. 1912) proposes a new genus (Hebonga) of the Simarubaceae from the Philippine Islands; the genus is represented by two known species.—C. S. SARGENT (Pub. Arnold Arb. No. 4, pp. 145-312. 1912) in cooperation with E. Koehne, A. Rehder, C. Schneider, and E. H. Wilson under the leading title of "Plantae Wilsonianae" has issued the second part of a series of papers dealing with plants collected in western China by Mr. E. H. WILSON in 1907, 1908, and 1910. The paper contains many new species and varieties, particularly in the Saxifragaceae and Rosaceae.-W. A. SETCHELL (Univ. Calif. Pub. Bot. 4:229-268. pls. 25-31. 1912), under the title "Algae novae et minus cognitae I" has published several new species, and proposes the following new genera: Hapterophycus of the Ralfsiaceae, Besa of the Gigartinaceae, and Baylesia of the Dumontiaceae.—J. M. GREENMAN.

The evolution of the chalazogams.—A rather extended paper by Nawaschin and Finn¹⁹ describes the morphology of Juglans nigra and J. regia and discusses the significance of chalazogamy. The paper is in Russian,

¹⁹ NAWASCHIN, S., and FINN, W., Zur Entwickelungsgeschichte der Chalazogamen. Juglans nigra und J. regia. Mem. Soc. Nat. Kieff 22:1-85. pls. 1-4. 1912.